

### ABSTRACT OF THE DISCLOSURE

A domain block image is extracted from an original image by a domain block extracting section, and the domain block image is classified by a domain block classifying section. A range  
5 block extracting section extracts a range block image larger than the domain block image from the original image, and a reduced range block forming section reduces the range block image at the same size as the domain block image. A similarity degree  
10 judging section judges a similarity degree between the reduced range block image and the domain block image, and an improved domain block forming section performs a conversion of pixel values with respect to the reduced range block image in accordance with this similarity degree. Further, an edge enhancement  
15 processing section executes an edge enhancement processing as to the step edge portion so as to obtain an improved domain block image.